library should not be available for use at the Museum till a year after publication. But the case is very different with the class of scientific publications now referred to. Of the foreign and colonial publications not many copies of each issue reach this country, and in some cases they can be seen only by the courtesy of an officer of a society that has received a copy. Then, again, not only the amount of interest taken in any particular communication, but sometimes its value, is changed in twelve months. It has been already said that perhaps the question may be raised whether the British Museum is the place to expect to see recent scientific publications, but it would be well if its present state were in any case known.

Then (3) as to the method of cataloguing. The use of the catalogue is of course to enable a reader to find the press mark of the books he wants with the least possible There may be differences of opinion as to the extent to which a catalogue should help a reader, but the facts as regards the British Museum are these. tific publications which are not books, magazines, or newspapers, are for the most part grouped under "Academies." The majority of those which do not fall under this head are to be found under the titles of the government departments by which they are issued. order not to waste time over the catalogue the reader must know certain particulars about the work he wants. If it is issued by a British government department he must know whether it has or not been presented to Parliament. For example, the pathological researches of Dr. Sanderson and Dr. Klein were addressed, through the Local Government Board, to the Lords of the Privy Council; the geological work of the Survey is through the Science and Art Department of the Committee of Council on Education, also under the Privy Council. The pathological researches are, however, presented to Parliament, and the volume containing any particular part of them must be, therefore, looked for under "Parliamentary Papers," while the geological work is not presented to Parliament, and must therefore be looked for under "Great Britain and Ireland—Geological Surveys." In the former case it is requisite to know beforehand in what year the papers were included; in the latter case the memoir to a map may be obtained in this way, but no clue is given as to how to obtain the map itself. (If the press mark for the map is searched for in the map catalogue, cross-references lead to "World-miscellaneous — see geographical and geological"). The difficulty of knowing whether a work has or has not been presented to Parliament is sometimes great. For example, some of Mr. Simon's Cholera Reports are included under the Registrar-General's returns and are therefore to be looked for among "Parliamentary Papers;" while the celebrated 1848 Report, which seems somehow not to have been presented, has to be found in the general catalogue under the name Simon, John. This is, of course, quite consistent with the method adopted. As it is with the British so with the foreign publications of departments, it is requisite to know to what department a report is sent. An entomologist may be surprised that to get at some of the United States' publications giving monographs on certain groups, he has to get his press-mark from the catalogue under United States—Department of the Interior—Geological Surveys of the Territories—yet such is the case. And this, too, is quite consistent with the method of cataloguing adopted.

If the work to be consulted is issued by a learned society it will probably be found entered under "Academies." In order to find it in the catalogue the exact title must be known. For example, it is no use to look for a Society of Arts' publication under "Society of Arts." it is requisite to go in the catalogue from "of" to "for" as the full title is "Society for the Promotion," &c. It is also essential to know whether a society has the prefix

kaiserliche or kaiserliche-königliche, or königliche, or Imperiale, or Royal, or British, or the title of any nationality or town. It is also requisite to know where the work is published, as the grouping is according to the plan, Academies at so and so. That a reader should first have all this information about a work he wants to consult may be very reasonable, for perhaps the collection at the Museum is too extensive to admit of printing, as the Patent Office library does, a compact and convenient "list of the scientific and other periodicals and transactions of learned societies in the free library."

But it is after a reader has found in the catalogue the title of the society that his real trouble begins. It might reasonably be supposed that the first entry under the name of the society would be the memoirs, transactions, or journal, as the case may be, of the society. That is not the British Museum plan. First are given the press marks of charter, laws, bye-laws, notices of annual meetings, lists of members, and such like things, and page after page has to be turned over to get to the publications of the society. If there are two sets of publications, such as quarto transactions and an octavo journal, these are generally separated by some pages of other references. To take a very familiar case, the memoirs of the French Académie are of course frequently referred to. After the reader has found the right volume of the catalogue containing "Academies at Paris," and has found Académie des Sciences, he will have to look on one page for vols. i. to xi., then, eight pages further on, for vols. xii. to xxiv., and then, further on again, xxv. onwards. It is difficult to imagine what principle is supposed to be followed, or what is gained to a reader by such a plan. If it should happen that the reader does not know that one series of the memoirs contains the communications of members and another series the communications of "Savans Étrangers," he will still have more trouble in obtaining what he wants. Or take an English case. Suppose a reader wishes to refer to an account of a paper communicated to the Ashmolean He will find, under that heading, entries of an account of the Society, old notices of meetings to be held (handbills), rules, &c., but no intimation of whether the Society issues any transactions.

In short, with all the societies, the entries of the regular publications are so mixed up with rules, list of members, bye-laws, &c., that it takes some time, after the right volume and right page have been found, to turn out their press mark. Again, it is not always easy for a reader to know what is classed as an academy and what is not. An account of a communication given before the Royal Institution in Albemarle Street must be sought in the journal catalogued under academies, while one given before the London Institution in Finsbury Circus, though equally a chartered society, must be sought under "London." Or again, how should the records of observations be catalogued? under periodical publications? under academies, or in the general catalogue. The practice differs in different cases.

Were it not for the kind and ready assistance given in cases of need by the reading-room superintendent and his assistants, a reader would be often quite unable to see what he needs.

## THE "GRAHAM" LECTURE AND MEDAL

SOME time ago the Chemical Section of the Philosophical Society of Glasgow had under consideration the propriety of raising a fund for the encouragement of original research. The movement soon began to assume practical shape, and in course of time the fund was found to have reached to nearly 3001, the subscribers being chiefly well-known chemical manufacturers and merchants in Glasgow and the west of Scotland. For a time there was

some difference of opinion as to whether the money subscribed should be invested for the purpose of endowing a lectureship or exclusively for the awarding of medals for original research. It was eventually agreed, however, hat two-thirds of the fund should be appropriated for lecture purposes and one-third for medal purposes, and it was likewise determined that the medal should bear the name of the "Graham" Medal; and that one triennial lecture should also be designated the "Graham" Lecture, both lectureship and medal being instituted in commemoration of the eminent services of a former citizen of Glasgow and member of the Philosophical Society, the late Thomas Graham, Master of the Mint, so distinguished for his researches in chemistry and physics.

As the scheme is now in such a complete state that it may be announced to the scientific world, we mention a

few facts of interest in regard to it.

Through their president, Mr. James Mactear, of St. Rollox Chemical Works, the Council of the Chemical Section have been successful in obtaining from Her Majesty's Mint a valuable die of Prof. Graham, and the authorities of the Mint have agreed to strike the medal free of charge, the Trust Fund supplying the necessary gold for the purpose. The Council intend to award the medal at not less intervals than three years, in order that time may be allowed for papers to be brought forward of sufficient merit to justify them in making an award. It may be remarked that the medals, of not less value than 101., is to be awarded for the best original investigation in chemical physics or in pure or applied chemistry, which may be communicated to the Philosophical Society of Glasgow, or the Chemical Section thereof, during the three sessions preceding the award. The Council of the Section will make the award, or it may be made by an equivalent body of local chemists of repute, with power on their part to remit the function to the Professor of Chemistry in University College, London, or to the Professor of Chemistry in the University of Edinburgh. Papers in competition for the "Graham" medal, may, we believe, be offered from any part of the United Kingdom; in other words, authors need not necessarily be members of the Philosophical Society of Glasgow, or of its Chemical Section. Dr. William Ramsay, University Laboratory, Glasgow, the present Secretary of the Section, will be glad to answer all inquiries in regard to the matter.

For the purpose of inaugurating the "Graham" lecture scheme in the most fitting manner possible, the Council of the Section have induced Mr. W. Chandler Roberts, F.R.S., the successor to Prof. Graham, as Chemist to the Mint, and for a long time his chief assistant in carrying out his later investigations, to deliver the first lecture, which is announced for Wednesday, the 22nd inst. Of course it is to be delivered in Glasgow. The subject is to be "Molecular Mobility, or some Forms of Invisible Motion," with special reference, doubtless, to the valuable physico-chemical researches instituted by Graham. It is the intention of the lecturer to exhibit and even to use a good deal of the apparatus employed by Graham, and now the property of Mr. Roberts.

"The fitness of things" in connection with the delivery of the inaugural "Graham" lecture is still further shown in the choice and consent of Mr. James Young, F.R.S., of Kelly, to preside on the occasion. There may be many readers of NATURE to whom it is not known that the gentleman just named was, when a very young man, a student in the evening popular classes conducted by Graham in the Mechanics' Institution and Anderson's College, Glasgow, whom he afterwards faithfully served as lecture assistant, first in Glasgow, and then in the laboratory of St. Thomas's Hospital, London. That he

This is surely a mistake; why any limit?-ED, NATURE.

benefited by the scientific teachings of his great master is abundantly evident in the fact that he is himself the founder of one of our greatest chemical industries, namely, the manufacture of paraffin and paraffin oils—in a sense, the creation of the last quarter of a century, but already big with scientific and practical results. His devout respect for Graham's memory has since become almost a passion, and it is but proper that he should "assist" at this further effort to commemorate the great scientific triumphs of his teacher, master, and friend.

JOHN MAYER

## NOTES

At the anniversary meeting of the Imperial Academy of Sciences of St. Petersburg, on December 29, 1878, it was announced that Mr. Hind, F.R.S., superintendent of the Nautical Almanac, had been elected a Corresponding Member of the Academy. Besides Mr. Hind there are in the list of Corresponding Members of this great Academy the names of Airy, Darwin, De la Rue, Frankland, Hooker, Huxley, Miller, Owen, Sabine, and Sylvester.

WE trust the subject discussed in our first article this week will meet with the attention it deserves in the proper quarter. It is clear that, by almost every civilised government but our own, the vast importance of meteorological observatories at high altitudes is recognised, and the universal value of weather forecasts is now taken as a matter of course. France has her Pic du Midi and Puy de Dôme, America her magnificently-appointed Pike's Peak, and, as our article shows, other countries in Europe have each one or more of these all-important lofty observatories; but, as usual, we are half-a-century behind. How valuable meteorological observations would be to the nation, on one or more of our loftiest Scotch mountains, any meteorologist can tell, and may be seen clearly enough from the article. We earnestly hope the question will not be allowed to subside, but will be persistently urged in the proper quarter as a matter of national importance. It would not take the price of a new gun to found such an institution as is wanted.

The telegraph wires of Pic du Midi Observatory have been broken again for a number of days. Some anxiety was felt at Toulouse for the safety of General Nansouty, and a rumour spread that the house had been crushed by an avalanche descending from the rock at the foot of which it has been built for protection against the wind. M. Albert Tissandier was sent to reconnoitre with three mountain guides. On January 9, in the morning, he started from Bagnères. On the 10th, in the evening, he arrived at the observatory, where he found that the rumours spread in the plains were unfounded; General Nansouty was taking his readings. On the following morning M. Tissandier took some drawings, and on the 12th he returned to Bagnères. The telegraphic communications with Puy de Dôme were interrupted on the 11th, at the very time when they were restored with Pic du Midi.

A SUCCESSFUL experiment was made the other night at Liverpool Street station in electric lighting, the particular form used being that known as the "Farmer-Wallace." Several platforms were successfully lighted up, and only one or two minor and easily remediable drawbacks characterised the display. By means of a small electro-magnet on the top of the frame, carrying a clutch, the carbons are kept constantly adjusted, without interference. The gas companies have at last determined to show what they can really do in the way of illumination, and give themselves fair play in any comparison with electric lighting. The Phœnix Company, on Saturday night, lit up a part of Waterloo Bridge Road with gas of increased power, on an increased number of lamps, with special burners, in specially-arranged cages. The result was quite sufficient to